

Statewide Model Framework



The California Department of Transportation (Caltrans) is developing statewide, interregional, and integrated planning efforts supported by a package of tools, data and model development. The objective is a better link between short- and long-range transportation planning informed with critical data and analysis that complements regional planning efforts.

Statewide Interregional Travel Demand Model

The Statewide Interregional Travel Demand Model is a statewide multi-modal travel demand model designed to identify transportation efficiencies (mobility enhancements with environmental responsibility). It will estimate long distance trips between regions. It is intended to provide the analytical framework for assessing transportation system adequacy, long range plan development, systems level project analysis, as well as to provide a statewide spatial analytical framework. The cost of the Statewide Interregional Travel Demand Model is \$1.0 m (funded) with a completion date of September 2010.

Web-based Interface to Statewide Interregional Travel Demand Model

To provide easier access to the Statewide Interregional Travel Demand Model, Caltrans is pursuing the development of an additional web-based interface tool to enable regional agencies to fully utilize

the statewide model. The web-based interface tool will focus on model operations and data management. The cost of the web-based interface tool is estimated at \$ 0.5 m (unfunded) with an estimated completion date of January 2011.

Freight Model

The Caltrans Freight Model is intended help Caltrans and the Air Resources Board better understand freight movement in California and its impacts on highway infrastructure, transportation networks, highway safety, energy use, and emissions. There is a need to develop freight modeling systems capable of evaluating the impacts of infrastructure enhancements and other related projects on traffic congestion, mobility, air quality, emissions analysis, public health, and climate change. The cost of the Freight Model is estimated at \$1.0 m (unfunded) with an estimated completion date of December 2012.

Statewide Integrated Interregional Transportation, Land Use and Economic Model

The Statewide Integrated Interregional Transportation, Land Use and Economic Model will forecast the interaction of transportation system investment and land use development. With this integration of models, Caltrans can better analyze the impacts of policy plans, programs and major investments on transportation, the economy, and the environment at a statewide level. The cost of the Statewide Integrated Interregional Transportation, Land Use and Economic Model is estimated at \$7.5 m (\$5.0 m unfunded) with an estimated completion date of December 2012.

California Household Travel Survey

Regional Travel Models and the Statewide Interregional Travel Demand Model use statewide multi-modal regional and interregional household travel behavior surveys as a base to forecast future travel behavior. With the California Association of Councils of Governments (CalCOG), Caltrans and the regional agencies have organized a Committee to implement the California Household Travel Survey. The cost of the effort, based on \$170 per survey, is estimated at \$5 m (\$2.2 m unfunded). The California Household Travel Survey will take approximately two years to complete.

